

Inspired by the  
visual art *genre*  
of interaction  
and the  
posthumanist  
*concept* of intra-  
action, I view  
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as creative  
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between artwork  
and  
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# Visualizing Data to Engage Intra-active Art: Unsettling Gender Roles and Promoting Educational Responsibility

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This paper introduces *Sweep it Under the Rug* as an exhibition that occurred at a university gallery in the Southeastern United States during February 2020. The exhibition aimed to unsettle gender roles and promote educational responsibility by visualizing data from survey participants and installation collaborators on the topic of gender. The survey addressed the role of personal and cultural expectations on gender expression through a series of questions about family, language, and more. The author shares memories from and writing about the exhibition and thinks with Karen Barad's concept of intra-action to explore how visualizing data might engage intra-active art as creative discourse between artwork and stakeholders that makes knowledge (visible) to effect change. The author suggests that intra-active art provokes feeling (loving), thinking (learning), and doing (becoming ethical and experimenting ethically) in (in)formal art education spaces, especially in a time of physical distance, and closes by wondering/ wandering on about literal and abstract together-apartness in our current and future times.

*Keywords: data visualization, intra-active art, gender roles, educational responsibility*

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A little more than a year ago, around this time, some of us were greeting students with a smile or high-five, while others were revising syllabi with new required readings and learning engagements. I write this paper using memories from that very different time—one before physical distancing and COVID-19. During August 2019, I attended a campus tour with a group of incoming students as a way of getting acclimated to my new subtropical surroundings and faculty position. Toward the end of the tour, we entered the historic William Johnston Building (formerly the Dining Hall for the Florida State College for Women during the first half of the 20<sup>th</sup> century) and walked by Gallery 1006. Because the Fall semester had not yet started, the gallery lights were off in the empty space. Still, the intimacy of the space called to me, and I envisioned in it an exhibition that included a braided rag rug I had completed over the summer. I would later title the work *Sweep it Under the Rug*.

*Sweep it Under the Rug* was an art installation from early 2020 that visualized data on the topic of gender. The data were collected from about 20 volunteer survey participants and an unknown number of installation collaborators<sup>1</sup> affiliated with a university in the Southeastern United States for the purpose of unsettling gender roles<sup>2</sup> and promoting educational responsibility. The survey addressed the role of personal and cultural expectations on gender expression through a series of seven questions about family, language, ethnicity and/or race, religion, economic status, school and/or work,

and media and/or social media (see sample responses, below).

- “What I have learned about gender from my *family* is to express competence because gender discrimination is so prevalent.”

- “What I have learned from my *language(s)* is to express anything I say or write about a person using gendered terminology, because that is what is ‘grammatically correct.’”

- “What I have learned about gender from my *ethnicity and/or race* is not to express anger because the angry Black man makes White people scared.”

- “What I have learned about gender from my *religion(s)* is not to express my inherent wildness, because tame assimilated women are acceptable.”

- “What I have learned about gender from my *economic status* to express the right price for my goods because people can be bought and sold.”

- “What I have learned about gender from my *school and/or work* is to express myself through gender-conforming clothing choices because non-conformity of dress is unprofessional.”

- “What I have learned about gender from the *media and/or social media* is to express queerness through song because singing along is fun.”

The exhibition was up for a month and began on February 7th with a performance in Gallery 1006 at my educational institution. As I mentioned, the space was intimate, but it was large enough to accommodate my body’s movements, a wooden broom and wicker basket,

<sup>1</sup> The number of collaborators is unknown because they were invited to intra-act with work at any time during business hours while the show was up for one month.

<sup>2</sup> According to Kay and Ward (2016), “gender roles are socially and historically constructed norms that are deemed acceptable and appropriate for individuals based upon their assigned sex” (p. 2).

## Figure 1

Amber Ward. Photographs from *Panty Pennants* installation



and a braided rag rug. I crafted the rug using recycled textiles from a previous exhibition on the topic of sexual identity (see Figure 1)<sup>3</sup>. The colors in the rug

complemented circular vinyl decals onto which survey responses were printed. Cultural signifiers inspired some of the color pairings (survey responses that addressed *economic status* were printed on green colored decals), while other pairings were more arbitrary.



After greeting the viewers, I entered Gallery 1006 and emptied the decals from a large wicker basket onto the gallery floor.

Then, I swept the decals under a braided rag rug (hence the artwork title). One by one, I collected each decal from under the rug, removed the backing, and pressed it onto the glass with circular gestures from inside the gallery. I repeated this step 100 times, while two graduate assistants (GAs) read aloud the survey

<sup>3</sup> The *Panty Pennants* installation from 2013 used stories collected from women to highlight sexual identity. I revealed their voices through audio, text, and by way of dyed and patterned forms. These forms resembled both thong panties and pennant flags and acted as a signifier for celebrating women and self-expression.

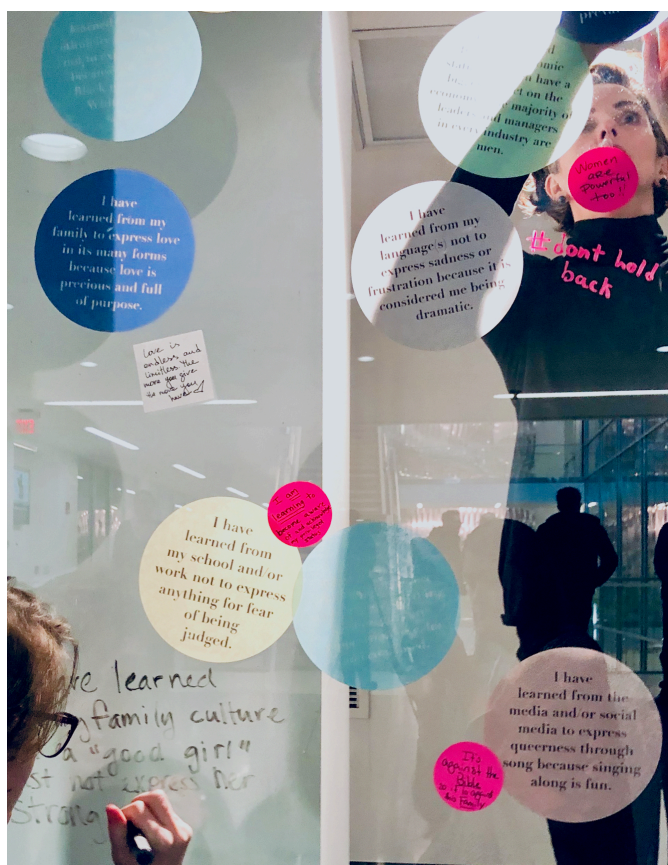
responses. The GAs seemed to read with intention and allowed for moments of silence between the responses. Every 10 minutes, the GAs stopped narrating to invite viewers to contribute to what they were seeing, hearing, and feeling by adding affirming visual and written text, or data, onto the glass wall that separated them from me, using materials like sticky notes, permanent markers, and liquid chalk markers. The affirming messages promoted educational responsibility when individuals became answerable to each other (Patel, 2016) and themselves through collaboration. After the performance ended, I thanked the GAs and collaborators and mentioned how strange it felt to be so close to yet separate from them.

This recollection jolts me back to the present and the together-apartness being asked of us by the COVID-19 pandemic, and, with inspiration from the *Journal of Social Theory in Art Education's* (JSTAE) Call for Papers for Vol 41 (2020), I wonder how memories from and writing about the exhibition might “provoke and reimagine thinking, doing, and or feeling for our current and future times” (para. 3) through critical social theory. Specifically, I think with Karen Barad’s (2007) concept of intra-action as posthuman discourse and ask: *In what ways might visualizing data engage intra-active art?* I reply to the question after (a) sharing photographs from *Sweep it Under the Rug* during the performance (see Figure 2) and just days before tear-down (see figures 3-8) and (b) introducing two keywords important to this research: visualizing data and intra-active art. I close by presenting the findings (see Feeling, Thinking, and Doing for our Current and Future Times) and conclusions (see Wonderings and Wanderings).

## Photographs from *Sweep it Under the Rug*

**Figure 2**

Sarah Johns. Photograph of *Sweep it Under the Rug* performance and collaborator response at Gallery 1006





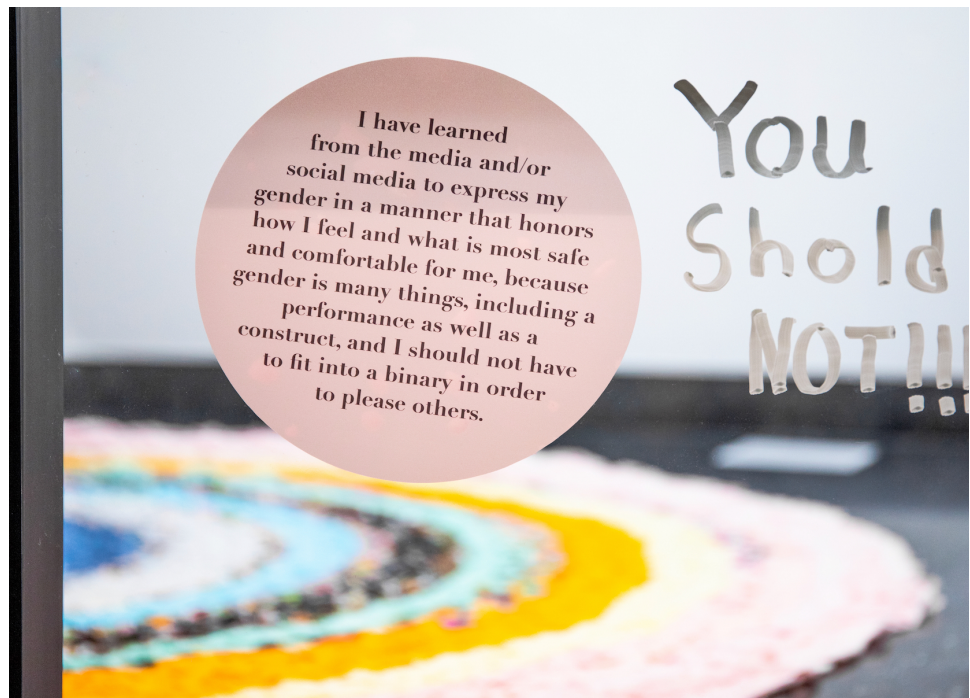
### Figure 3

Tiffany Ward. Photograph of Sweep it Under the Rug in Gallery 1006



### Figure 4

Tiffany Ward.  
Photograph of survey  
participant decal and  
installation collaborator  
response (foreground) and  
braided rag rug  
(background)



*Tiffany Ward. Photograph of decal and response (foreground) and wooden broom and wicker basket (background)*



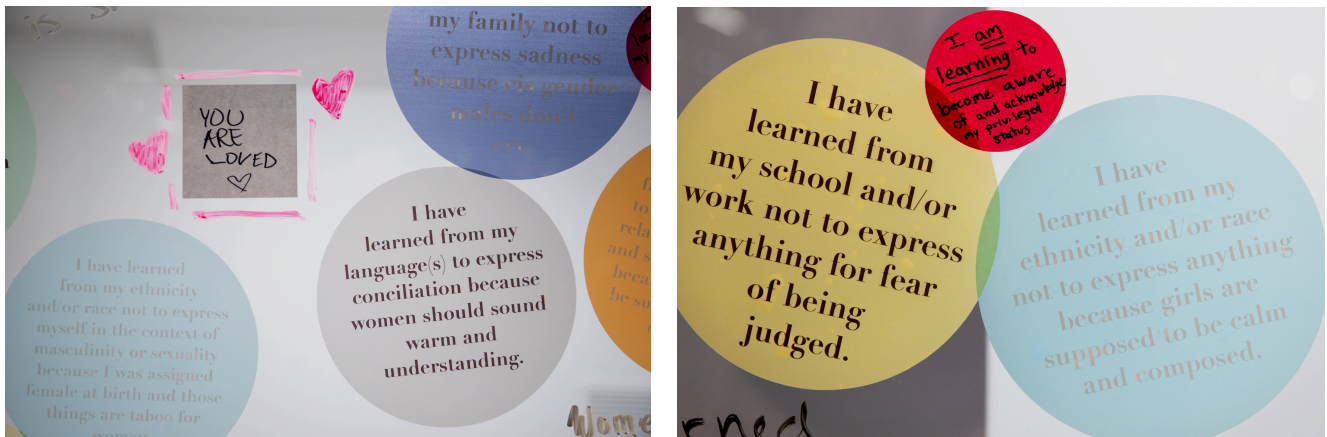
*Tiffany Ward. Photograph of several decals and responses*





**Figure 7**

*Tiffany Ward. Detail photographs of decals and responses*



**Figure 8**

*Tiffany Ward. Photograph of Sweep it Under the Rug from inside Gallery 1006*



## Form/Material and Genre/Concept

Earlier, I ask: *In what ways might visualizing data engage intra-active art?* I respond to this question (actually, a version of it) in the following section, after presenting two keywords that are important to the research: visualizing data and intra-active art. Specifically, I introduce data visualization as form and material and intra-active art as genre and concept.

### Visualizing Data: Form and Material

In 2013, the National Art Education Association (NAEA) Research Commission recognized a need for a Data Visualization Working Group (DVWG) to “advance the understanding, meaning, and relevance of research results, all of which are necessary for building a culture of research and for demonstrating the value of art education to stakeholders” (para. 4). Their “Call for Collaboration” (2013) stated, “*Using research results depends on understanding research results, which depends on a researcher clearly communicating results. Data visualization can help all fronts*” (para. 1, emphasis in original). The NAEA Research Commission’s DVWG website (n.d.), also seemed to suggest that data visualization aids in communicating and understanding information; specifically, the website mentioned that data visualization makes abstract information comprehensible so that we can make sense of the world around us. While data visualization often is employed in research and evaluation communities (NAEA Research Commission Data Visualization Working Group, 2013), the website discussed how artists might employ data as “material, medium, form and inspiration for art” (National Art Education Association Research Commission’s Data Visualization Working Group, n.d., para. 1) to help with the “visualization of ideas” (National Art

Education Association Research Commission’s Data Visualization Working Group, n.d., para. 4).

*Sweep it Under the Rug* employed data both as *form* and *material*. As a reminder, the data were collected from volunteer survey participants and installation collaborators. The collaborators were invited to respond to the circular vinyl decals (*data as material*) that presented the survey responses (*data as form*) by adding affirming visual and written text (*data as form*) onto the glass wall, using materials like sticky notes, permanent markers, and liquid chalk markers (*data as material*). Employing data as form and material allowed participants and collaborators to communicate gender equity; it also offered collaborators an opportunity to communicate educational responsibility.

### Intra-Active Art: Genre and Concept

On the evening of February 7, 2020, I read an Institutional Review Board (IRB) Script to viewers turned collaborators as an invitation to participate in the exhibition. I include an excerpt in what follows.

On the table [points in the direction of the table], you will find various materials available for your use. I invite you to intra-act with the exhibition, using affirming visual and/or written text on the glass wall between us. Together in our creative connectedness and communication, we can become “ethical subjects” (Braidotti, 2013, p. 190) by exceeding traditional modes of language and transcending the obstacles of negativity (Braidotti, 2013).

I have come to understand intra-active art both as genre and concept, while drawing from visual arts and posthumanism. According to John Parks (2015), “interactive art is a contemporary genre in which the audience is invited to participate in an artwork, effecting change in its appearance,



outcome, and meaning. By giving the audience this authority, the work departs radically from a long tradition of authorial control" (p. 94, emphasis added) in the arts. In posthumanism (and in metaphysics), intra-activity is knowledge that is mutually produced through discourse and matter (Lenz Taguchi, 2012). According to Barad (2008), discourse "is that which constrains and enables what can be said" (p. 137), and matter is a doing and an undoing—a verb, rather than a noun. I am particularly drawn to Barad's (2007) concept of intra-action, or how we come to know when our experiences in and with the world inform what we can say. Thus, inspired by the visual art *genre* of interaction and the posthumanist concept of intra-action, I view intra-active art as creative discourse between artwork and stakeholders<sup>4</sup> that makes knowledge (visible) to effect change.

### **Visualizing Data to Engage Intra-active Art**

Spending time with visualizing data and intra-active art as keywords allows me to see a fuller research question materializing in the middle of writing about the exhibition. Specifically, I plug in for both keywords and wonder: *In what ways might [employing data as form and material] engage [creative discourse between artwork and stakeholders that makes knowledge (visible) to effect change]*<sup>5</sup>?

In the context of the exhibition under review, effecting change is related to unsettling gender roles and promoting educational responsibility. Both participants and collaborators worked to unsettle gender roles, while collaborators promoted educational responsibility. Participants employed written text via survey responses (see

additional sample responses, below) to unsettle gender roles, and collaborators employed both visual and written text onto the glass gallery wall (see sample responses, below) to unsettle gender roles and promote educational responsibility. Photographs that captured the exhibition augment my memories and writing and aid in the presentation of the analysis found in tables 1-5.




<sup>4</sup> In the context of this research, stakeholders are the participants, collaborators, GAs, and me.

<sup>5</sup> As a review, the original question asked: In what ways might visualizing data engage intra-active art?

**Table 1***Participants: Written Text*

Data as Form	Data as Material
"I have learned from my family not to express sadness because cis gender males don't cry."	White type on indigo circle vinyl decal
"I have learned from my ethnicity and/or race not to express my origins, heritage, or family history because of shameful backgrounds including illegitimate children, uneducated family members, and social class."	White type on turquoise circle vinyl decal
"I have learned from my economic status to express myself politely and with grace because etiquette was highly valued in my home growing up, likely because of the SES [socioeconomic status] in which I was raised."	Gray type on green circle vinyl decal

**Table 2***Collaborators: Visual Text*

Data as Form	Data as Material
	Pink liquid chalk marker on glass wall
	Pink liquid chalk marker on glass wall
	Pink liquid chalk marker with black permanent marker outline on pink circle sticky note

**Table 3***Collaborators: Written Text*

Data as Form	Data as Material
"I have a lot to learn..."	Pink liquid chalk marker on glass wall
"Somehow I have learned about myself from you."	Black permanent marker on white square sticky note
"I <u>am</u> learning to become aware of and acknowledge my privileged status"	Black permanent marker on pink circle sticky note

Some installation collaborators seemed to put written text under erasure (see Derrida, 1967; Heidegger, 1956/1958), striking through specific text on survey response decals, which acknowledged and challenged linguistic signifiers. Two examples are provided below.

**Table 4**

*Collaborators: Written Text Under Erasure*

Data as Form	Data as Material
"I have learned from my religion(s) <del>not</del> to express intelligence or question authority because girls <del>ought to be quiet, timid and submissive.</del> "	Pink liquid chalk marker on glass wall and over white type on orange circle vinyl decal
"I have learned from my religion(s) not to express myself because there is a right <del>and a wrong</del> way to identify." A collaborator goes on to state next to the survey response decal, "AND THIS IS <u>A RIGHT WAY!!!!</u> " (see Figure 5, above).	White liquid chalk marker on glass wall and over white type on orange circle vinyl decal

**Table 5**

*Collaborators: Visual and Written Text*

Data as Form	Data as Material
"hello you are ♥ beautiful"	Pink liquid chalk marker on glass wall
"YOU ARE <u>AMAZING</u> 🌸 remember that 🍷"	Pink liquid chalk marker on glass wall
"You🌸are beautiful🌸🌸🌸 they are 🌸 photoshopped🌸🌸"	Pink liquid chalk marker on glass wall

## **Feeling, Thinking, and Doing for our Current and Future Times**

With the revised research question in mind, as well as JSTAE's Call for Papers<sup>6</sup>, my memories and writing teach me that the creative discourse between artwork and stakeholders provokes feeling (loving), thinking (learning), and doing (becoming ethical and experimenting ethically) in (in)formal art education spaces, especially in a time when we are physically distant. The survey participant decals affected the installation collaborator responses, and the effect unsettled gender roles and promoted educational responsibility. The following outcomes focus on the shared feeling, thinking, and doing once the collaborators were invited into the discourse.

### **Loving, Learning to Unsettle Gender Roles**

The collaborator data and analysis shared in the previous section includes visual text, written text, and visual and written text. The visual text pictured schemas like hearts and figures; the written text featured iterations of learn, learned, and learning; and the visual and written text highlighted a smiling face with sunglasses and repeated arrows and flowers, as well as adjectives like beautiful and amazing. Visualizing data with both visual and written text on the topic of gender expression works to unsettle gender roles by amplifying those narratives that otherwise have been historically silenced. Amplifying narratives also produces solidarity when collaborators share with the installation participants and viewers affirming messages on loving and learning. Building solidarity might work to challenge feelings like isolation when one's gender expression does not align with the

traditional ways of moving through the world. During these (and future) times when sexism, racism, and so many other -isms are prevalent, loving and learning are important to art education because they demonstrate a shared commitment to individual and community growth through an ethos of care.

### **Becoming Ethical and Experimenting Ethically to Promote Educational Responsibility**

The affirming messages on love and learning also promoted educational responsibility when individuals became answerable to each other (Patel, 2016), themselves, and matter through collaboration that was socially connected but physically distant. Specifically, the creative discourse addressed complex social and educational problems and furthered educational responsibility goals that foregrounded ethics. Perhaps I anticipated the emphasis on ethics, as Braidotti's (2013) work moved through me and the IRB Script, suggesting that collaborators and I could become "ethical subjects" (p. 190) together in our creative connectedness and communication by transcending the obstacles of negativity and exceeding traditional modes of language. St. Pierre, Jackson, and Mazzei (2016) also suggested that thinking and living beyond familiar structures can offer a turn toward the ethical when curiosity and experimentation meet new problems. As art educators, we are uniquely positioned to ask ourselves and our communities of learners to redefine critical thought (Braidotti, 2013) and "think and make another" (St. Pierre, Jackson, & Mazzei, 2016, p. 102) such that we work toward becoming ethical and experimenting ethically. Becoming ethical and

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<sup>6</sup> As a reminder, the Call for Papers (2020) asks for submissions "that provoke and reimagine thinking, doing, and or feeling for our current and future times" (para. 3).



experimenting ethically are important to art education during these (and future) uncertain times due to COVID because they enable us to be creative and revolutionary when faced with adversity.

### **Wonderings and Wanderings**

*Feeling, thinking, and doing for our current and future times* doesn't call me to "end" with a conclusion or implications, but rather, to wonder/ wander on about the literal together-apartness in response to COVID-19 and the abstract together-apartness conjured up by sexism, racism, and similar -isms. My perspective of the *Sweep it Under the Rug* performance in early February 2020 (just one month before the initial U.S. lockdown), seems now like a premonition, as I reminisce about the fleeting moments when the installation collaborators' eyes, smiles, and palms met my own across the glass wall of Gallery 1006. With this in mind, I suggest that art educators might consider ways to employ intra-active art in their classrooms and scholarship to incite creative discourse between artwork and stakeholders that makes knowledge (visible) to effect change and address together-apartness.

Wondering and wandering about literal and abstract together-apartness, I share additional memories about *Sweet it Under the Rug*, as well as some surprises. On occasion, a few memories from the show gently tug at my spirit. For example, I briefly mention the GAs above, but it's important for me to share just how much they contributed to the success of the exhibition. I'd like to introduce graduate students, Egda and Julie, with whom I met on numerous occasions during Fall 2019 and Spring 2020 to discuss the performance and the responsibilities leading up to it. One of my favorite memories with Egda and Julie took place on January 31, 2020 when we three met to practice the performance. I

smile when remembering how both seemed to offer insightful recommendations and constructive criticism without reservation. One excellent suggestion they made was to create planned pauses when reading the survey response narratives during the performance as a way to cue viewer participation. Another memory I enjoyed occurred just after the performance. Shortly after exiting the gallery, a participant approached me to share their "feelings of validation" when hearing the survey response they submitted read aloud. Finally, I recall dozens of visits to Gallery 1006 after arriving on campus each morning during the month of February. It was so wonderful spending quiet time with new messages left behind for survey participants from installation collaborators.

On occasion, I read messages that didn't sit right with me because I didn't view them as affirming. They weren't surprising, but I am now surprised at how my removing the messages creates some tension in me. Specifically, I feel uneasy about censoring others; however, I would feel even more uneasy about not protecting survey participants who took risks by openly addressing the role of personal and cultural expectations on their gender expression. Another surprise worth mentioning is that I modified the IRB protocol three times, from October 2019 to February 2020, in response to how the exhibition called me to address its pleas. In other words, not only was I surprised by the exhibition's agency, but also my openness about it. My last wondering/wandering is about seeing my reflection in the glass in photographs from *Sweep it Under the Rug*. I'm not sure I know what the reflection means, but I do appreciate how it makes me feel like the exhibition memories, Gallery 1006, visual and written text/data, IRB

protocol, Egda and Julie, survey participants, installation collaborators, together-apartness, and... are becoming part of me and my personal experiences and why/how I write up this paper and share it with you now as a way to further *provoke and reimagine thinking, doing, and or feeling for our current and future times.*

## References

- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglements of matter and meaning*. Duke University Press.
- Barad, K. (2008). *Material feminism*. Indiana University Press.
- Braidotti, R. (2013). *The posthuman*. Polity Press.
- Derrida, J. (1967). *Of grammatology*. Johns Hopkins University Press.
- Heidegger, M. (1958). *The question of being* (W. Kluback & J.T. Wilde, Trans.) Twayne Publishers.  
(Original work published 1956)
- Journal of Social Theory in Art Education*. (2020). *Call for Papers for Vol 41*. Retrieved September 1, 2020, from [https://scholarscompass.vcu.edu/jstae/JSTAE\\_41\\_CFP.pdf](https://scholarscompass.vcu.edu/jstae/JSTAE_41_CFP.pdf)
- Kay, L., & Ward, A. (2016). *Feminist terms and definitions* [Unpublished manuscript]. Tyler School of Art and Architecture, Temple University & Department of Art, California State University, Sacramento.
- Lenz Taguchi, H. (2012). A diffractive and Deleuzian approach to analysing interview data. *Feminist Theory*, 13(3), 265-281.
- NAEA Research Commission Data Visualization Working Group. (2013). *A Call for Collaboration* [PDF]. National Art Education Association.
- National Art Education Association Research Commission's Data Visualization Working Group. (n.d.). *Is it art? Data visualization*. Retrieved September 4, 2020 from <http://cyberhouse.emitto.net/dataViz/artists.html>
- Parks, J. A. (2015). *Universal principles of art: 100 key concepts for understanding, analyzing, and practicing art*. Rockport.

Patel, L. (2016). *Decolonizing educational research: From ownership to answerability*.

Routledge.

St. Pierre, E. A., Jackson, A. Y., & Mazzei, L. (2016). New empiricisms and new materialisms:

Conditions for new inquiry. *Cultural Studies-Critical Methodologies*, 16(2), 99-110.